UNITED STATES DISTRICT COURT

DISTRICT OF MASSACHUSETTS

THOMAS MELONE,

Plaintiff,

v.

JANET COIT, in her official capacity of Assistant Administrator, of the National Marine Fisheries Service, and the NATIONAL MARINE FISHERIES SERVICE,

Defendants.

Case No. 1:21-cv-11171

PLAINTIFF'S STATEMENT OF UNDISPUTED FACTS IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

Plaintiff Thomas Melone pursuant to Fed. R. Civ. P. 56 files this statement of undisputed facts ("SUF") for which Plaintiff contends there is no genuine issue to be tried in support of Plaintiff's motion for summary judgment.

1. Plaintiff Thomas Melone lives part-time in Edgartown, Massachusetts, on Nantucket Sound during the months of May through November with the bulk of the time being from June through September. Declaration of Thomas Melone ("Melone Decl."), ¶5. Plaintiff Melone has a particularized interest in and is concerned about the adverse effect of the Vineyard Wind project and other foreseeable offshore wind projects will have on the North Atlantic Right Whale ("NARW") whose critical habitat includes Nantucket Sound. *Id.* ¶6. Plaintiff Melone derives recreational, conservation, environmental well-being and aesthetic benefits from the existence of the NARW and their properly functioning habitat through wildlife observation, study, and education. *Id.* Melone believes in developing sustainable and economically viable renewable energy generation in the United States, while maximizing the creation of United States jobs and minimizing the impact to the environment. *Id.* Melone believes that offshore wind has too many

adverse impacts and creates too much risk and adverse impacts on the marine, coastal and human environment and various species. *Id*.

- 2. Throughout Melone's life he has enjoyed observing marine life and enjoying the recreational, conservation, environmental well-being and aesthetic benefits from doing so. *Id.* ¶7. From local places such as the Jersey shore as a child, to far flung locations as an adult, such as Point Barrow, Alaska, Norway, and Australia, he has enjoyed observing marine life and enjoying the recreational, conservation, environmental well-being and aesthetic benefits from doing so. *Id.* He has enjoyed observing dolphins and whales off the coast of Malibu on visits to California and enjoyed the recreational, conservation, environmental well-being and aesthetic benefits from doing so. *Id.* He has enjoyed looking for marine life and polar bears off the beach in Point Barrow, Alaska and enjoyed the recreational, conservation, environmental well-being and aesthetic benefits from doing so. *Id.* He has enjoyed observing marine life including humpback and orca whales in Prince William Sound, Alaska, and enjoyed the recreational, conservation, environmental well-being and aesthetic benefits from doing so. *Id.* He has enjoyed sitting on the beach at night observing penquins march to the ocean in Philip Island, Australia, and enjoyed the recreational, conservation, environmental well-being and aesthetic benefits from doing so. *Id.*
- 3. In respect of the NARW, Melone first expressed his concerns to the Defendants regarding the Vineyard Wind project in 2019 in a public comment. *Id.* ¶8. During the public comment period on the supplement to the draft environmental impact statement for the Vineyard Wind project, Melone submitted 56 pages of comments, including comments regarding the NARW. *Id.* Since that time, he has watched in disbelief as the NARW population declines at an alarming rate and the Defendants authorize exponential increase in the "take" of the NARW. *Id.*
 - 4. Melone's first trip planned for observing the NARW in Florida was in December

2020 at Amelia Island, however, due to the COVID-19 pandemic, that trip was cancelled. *Id.* ¶9. In respect of the NARW, Plaintiff Melone went whale watching on New England Aquarium's Whale Watch Cruise on October 1, 2021, looking for the NARW. *Id.* Melone did not observe a NARW on that trip, but did observe a handful of humpback whales, another species that Melone derives recreational, conservation, environmental well-being and aesthetic benefits from. *Id.* On October 26-27, 2021, Melone attended two full days of events of the NARW Consortium Annual Meeting, learning from experts about the plight of the NARW. *Id.*

- From December 28, 2021, to December 31, 2021, Melone engaged in a NARW-5. watch in Fernandina Beach, Florida, from a fifth-floor room at the Ritz Carlton using Celestron – SkyMaster 25X100 Astro Binoculars. *Id.* ¶10. Melone observed many porpoises each of the four days, and observed a NARW (Derecha) and her calf on December 30, 2021, at 7:40am. Id. Melone observed them until 8:00am at which point he reported the sighting on the WhaleAlert app. Id. After he reported the sighting, he continued to search for them but did not see them. *Id.* after 9am he received a call from a representative from the Florida Fish & Wildlife Conservation Commission ("FL FWCC") asking him about the sighting. Id. He gave her the information and then she said that their people would be taking off to soon to verify the sighting. *Id.* The following day the FL FWCC let him know they confirmed the sighting. *Id.* Melone intends to annually attend the NARW Consortium Annual Meeting continuing to learn and study the NARW and to annually engage in a NARW watch from Fernandina Beach in December or early January, which is the time of year that NARWs are present in the waters off Fernandina Beach. *Id.* Melone has registered to attend virtually the 2022 NARW Consortium Annual Meeting. *Id.* Melone's next scheduled trip to Fernandina Beach for NARW watching is December 28 to January 1, 2023. *Id.*
 - 6. The Defendants' failure to comply the MMPA will result in an inadequate

mitigation of harm to the NARW and their habitats that benefit Plaintiff Melone. *Id.* ¶11. This harms Plaintiff Melone's past, present and future enjoyment of this species and their habitats. *Id.* The Defendants' approvals and failure to adhere to the MMPA would imminently harm Melone because it would reduce his likelihood of spotting NARWs in his planned annual trips to Fernandina Beach for NARW watching lessening the aesthetic, environmental well-being, recreational, conservation, and benefits Melone derives from the NARW. *Id.* The Defendants' approvals cause the NARW to be taken, interfere with the NARW's natural state and increase their risk of death and serious injury, reducing the likelihood that Plaintiff Melone will observe the NARW in their natural state on future visits. *Id.*

- 7. On January 16, 2019, Vineyard Wind submitted to NMFS a request under section 101(a)(5)(D) of the MMPA for an incidental harassment authorization (IHA) to take by Level A and Level B harassment marine mammals caused by pile driving during construction of the Vineyard Wind Project. NMFS 145737 (IHA Application); NMFS 14581 (E-mail Submission). The VW IHA application was deemed adequate and complete on February 15, 2019. NMFS 3392.
- 8. On April 30, 2019, NMFS published a notice in the Federal Register regarding its proposal to issue an IHA to Vineyard Wind. NMFS 3392. The notice identified the species that potentially occur in the Project area and may be taken due to in-water noise exposure resulting from pile driving activities associated with installation of the wind turbine generators and electrical service platforms. *Id.* at 3396. The notice invited public comment on the proposal to issue an IHA. *Id.* at 3427. The public review period closed on May 30, 2019. *Id.* at 3392.
- 9. NMFS is a cooperating agency with BOEM with respect to the environmental review of the Vineyard Wind project. *Id.*
 - 10. NMFS issued an IHA on May 21, 2021, to Vineyard Wind under the section

1371(a)(5)(D) of the MMPA (NMFS 3489-3509 and NMFS 3514).

- 11. The notice of IHA was published in the Federal Register on June 25, 2021. NMFS 3515. The IHA states that it is valid from May 1, 2023 through April 30, 2024. NMFS_00003515 (86 Fed. Reg. 33,810 (June 25, 2021)).
 - 12. The NARW population is now estimated to be at only 336 individuals.¹
- 13. NMFS has determined that the Potential Biological Removal ("PBR") for the NARW, defined by the Marine Mammal Protection Act ("MMPA") as "the maximum number of individuals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population" is 0.7 whales. NMFS Proposed Speed Rules at 46922.² "This means that for the species to recover, the population cannot sustain, on average over the course of a year, the death or serious injury of a single individual due to human causes." *Id.* at 46923.
- 14. In issuing the IHA to Vineyard Wind, NMFS only looked at noise from pile-driving. NMFS 3489 ("This IHA authorizes take incidental to pile driving associated with the construction of the Vineyard Wind Project in the Atlantic Ocean offshore of Massachusetts within the Wind Development Area (WDA) of Lease Area OCS-A 0501.") It did not look at the risk of vessel strikes from Vineyard Wind's vessels that in general would have no speed limits. *Id.* Nor did NMFS look at the increased risk of vessels strikes due to Vineyard Wind's chasing the NARW from the Vineyard Wind lease area with its pile-driving into areas with higher vessel traffic. *Id.*

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¹ H.M. Pettis, *et al.*, North Atlantic Right Whale Consortium 2021 Annual Report Card: Report to the North Atlantic Right Whale Consortium (2022), https://www.narwc.org/uploads/1/1/6/6/116623219/2021report cardfinal.pdf.

² Proposed "Amendments to the North Atlantic Right Whale Vessel Strike Reduction Rule," Federal Register, Vol. 87, No. 146, at 46922 (2022) ("NMFS Proposed Speed Rules"), https://www.fisheries.noaa.gov/action/amendments-north-atlantic-right-whale-vessel-strike-reduction-rule.

15. Two recent scientific studies confirm what NMFS knew (but ignored) when it issued the Vineyard Wind IHA—that as climate refugees, the NARW have returned year-round to their historical feeding and mating grounds—the wind energy lease areas south of Martha's Vineyard—as illustrated below from *O'Brien 2022*. ³

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³ E. Quintana-Rizzo et al., "Residency, demographics, and movement patterns of North Atlantic right whales Eubalaena glacialis in an offshore wind energy development area in southern New England, USA," Endangered Species Research, Vol. 45: 251–268 (2021) (NMFS 53318-53335) ("Quintana 2021"). O. O'Brien, D. E. Pendleton, L. C. Ganley, K. R. McKenna, R. D. Kenney, E. Quintana-Rizzo, C. A. Mayo, S. D. Kraus & J. V. Redfern, Repatriation of a historical North Atlantic right whale habitat during an era of rapid climate change (July 20, 2022). https://www.nature.com/articles/s41598-022-16200-8 ("O'Brien 2022").

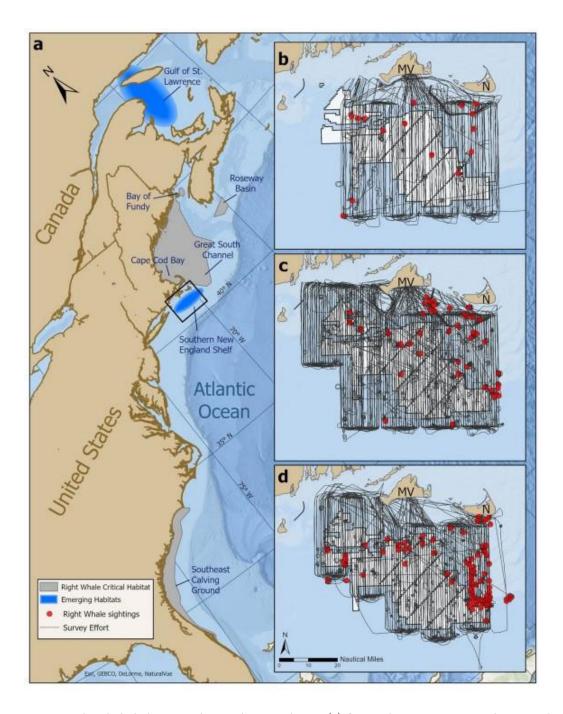


Figure 1. Known right whale habitats in the Northwest Atlantic. (a) Gray polygons encompass known right whale habitats; blue ovals represent emerging habitats. Black box and insets show the New England Aquarium broad-scale survey area. (**b**–**d**) Broad-scale survey effort (black lines) and right whale sightings (red circles) during three different time periods: (b) 2011–2012, (c) 2013–2015, (d) 2017–2019. White shading represents MA/RI wind energy lease areas. MV = Martha's Vineyard, N = Nantucket. Figure was created using ArcGIS Pro (version 2.9.2).

Melone Decl., Exh. A; NMFS 53318; NOAA's April 15, 2021, featured story entitled: *North Atlantic Right Whales On the Move in the Northeast:* "A very small portion of the right whale population heads south to the waters off northern Florida and Georgia in the winter—mostly just the moms—to give birth," said Tim Cole, a marine mammal researcher and lead of the center's aerial whale survey team. We try to determine where the rest of the population is and have found them so far this year in large numbers on Nantucket Shoals south of Martha's Vineyard and Nantucket, and in Cape Cod Bay."⁴

- 16. The crew transfer vessels ("CTVs") for Vineyard Wind will be more than 98 feet long, with a maximum speed of 29 knots (33mph).⁵ Crew members can work a maximum of 12 hours/day. NMFS 15814. Construction of the project will be based out of New Bedford, MA, which by vessel is a 50-to-60-mile trip to the wind development area ("WDA"), depending on the route taken. *Id.* The CTVs will transport crews from New Bedford to the WDA and bring crews back to New Bedford, as crews work on a rotational basis. *Id.* This equates to two round trips per day. *Id.* The 50-to-60-mile trip at 10 knots would take approximately 4.5 to 5 hours each way, which is not feasible when workers can only work offshore a maximum of 12 hours a day. *Id.* As Vineyard Wind told NMFS: "Simply put, the project could not be constructed within one season if there was a 10 knot speed restriction during construction." *Id.*
- 17. The Defendants did not issue notices requesting public comment through newspapers of general circulation, and appropriate electronic media and from all locally affected communities with respect to the Vineyard Wind IHA, harming Plaintiff. Melone Decl., ¶¶17-18.

⁴ https://www.fisheries.noaa.gov/feature-story/north-atlantic-right-whales-move-northeast.

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⁵ Melone Decl., Exh. D, https://www.oedigital.com/news/498226-st-johns-shipbuilding-starts-building-ctv-for-u-s-offshore-wind-farm.

- 18. The Defendants failed to request public comment with respect to the Vineyard Wind IHA through newspapers of general circulation, and appropriate electronic media and to all locally affected communities for a period of 30 days after publication, which affected communities include the entire range of the NARW (including Martha's Vineyard and Amelia Island). *Id*.
- 19. NMFS interpreted the small numbers requirement of the MMPA as applied to the Vineyard Wind IHA as meaning 5.4% for dolphins and 5.0% for NARW. NMFS 3482-8.
- 20. "Specified geographical region means an area within which a specified activity is conducted and that has certain biogeographic characteristics." 50 C.F.R. §216.103. NMFS engaged in no analysis to determine what is a region under the MMPA based upon biogeographic characteristics. NMFS3392-3427, 3482-8.
- 21. In reviewing, issuing and failing to rescind the Vineyard Wind IHA, NMFS has ignored the other requests by citizens for the same type of activity—surveys for, and construction and operation of offshore wind farms in the geographical region in which the NARW habitate. NMFS 3482-8, 3489, Melone Decl. ¶27.
- 22. The Notice of Proposed IHA for Vineyard Wind defined the "specific geographic region" as "the northern portion of the 675 square kilometer (km) (166,886 acre) Vineyard Wind Lease Area OCS-A 0501." NMFS 3393.
- 23. NMFS's statement of the specified geographical region is not based upon any analysis of biogeographic characteristics. NMFS 3392-3427, 3482-8.
- 24. The Vineyard Wind project will require more than 1 year for its construction and operations plan ("COP") activities (including construction), causing noise from pile driving, dredge from the disturbance of the sea floor, increased vessel traffic and other effects discussed in the Final EIS. BOEM 68581.

- 25. The Vineyard Wind project would be operated and then would need to be decommissioned. BOEM 68486.
- 26. In a memorandum dated April 22, 2019, Jolie Harrison, the Chief of the NMFS Permits and Conservation Division concluded that "[t]he possibility of take by serious injury or death is considered unlikely, based on the best available information. Unlike the use of explosives or mid-frequency sonar, which can kill or seriously injure marine mammals, the sound from pile driving is very unlikely to result in the types of physiological or behavioral reactions that could result in serious injury or death." NMFS 3559. The Permits and Conservation Division's conclusion that serious injury is very unlikely means that the activity still has the *potential* to result in serious injury or mortality, even if less likely than not. *Id*.
- 27. Vineyard Wind's activities under the COP have the potential to result in serious injury or mortality. *Id.*, NMFS Proposed Speed Rules, SUF15.
- 28. Numerous vessel transits that will be made for pile-driving activities (including high-speed vessel transits) and the other activities under the COP have the potential to result in serious injury or mortality from vessel strikes. *Id.*, NMFS Proposed Speed Rules, SUF15.
- 29. The EIS indicates that these large and fast crew transfer vessels will account for the lion's share all the Project's vessel trips. BOEM 34746.
- 30. NMFS issued proposed regulations on August 1, 2022, proposing new speed limits in the area that all Vineyard Wind vessels will travel.⁶ NMFS's discussion in the proposed regulations confirms that Vineyard Wind's vessel transits have the potential to cause serious injury

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⁶ Melone Decl., Exh. C, Federal Register, Vol. 87, No. 146 at 46921 (August 1, 2022), https://www.federalregister.gov/documents/2022/08/01/2022-16211/amendments-to-the-north-atlantic-right-whale-vessel-strike-reduction-rule.

or mortality of the NARW. *Id.* NMFS's discussion in the proposed regulations also confirms NMFS did not take the required hard look at risk to the NARW from vessel strikes. *Id.*

- 31. Crucially, NMFS's proposed regulation are based upon information that it already had in its possession when it issued the Vineyard Wind IHA. *Id.* NMFS simply did not take the required hard look, or indeed any look, at the risk to the NARW from vessel strikes and authorizing Vineyard Wind vessels to travel at a speed greater than 10 knots. *Id.*, NMFS 3392-3427, 3482-8.
- 32. In the Notice of Proposed IHA, NMFS described the specific activity as the construction of the Vineyard Wind Offshore Project. NMFS 3392 ("Vineyard Wind, LLC (Vineyard Wind) is proposing to construct an 800 megawatt (MW) commercial wind energy project (the Project) in Lease Area OCS-A 0501, offshore Massachusetts.") But then illogically, NMFS analyzed take from only the noise from the driving of piles into the ocean floor. NMFS 3392-3427, 3482-8. NMFS failed to analyze the entire construction activities offshore. *Id.* NMFS also failed to analyze the activities integral to pile driving and construction, such as vessel transits (including CTVs) to and from New Bedford, Massachusetts. *Id.*
- 33. The noise and other harassment from the Project will affect a greater than small number of NARWs and other marine mammals and NMFS's decision was based on outdated data. *Id.*, NMFS 14612-5, NMFS 53318-335, Melone Decl. Exhs. A-F.
- 34. The IHA authorized the take, Level B Harassment, at 20 individual NARWs. NMFS 3510. NMFS based the calculation of twenty on a spreadsheet provided by Vineyard Wind. NMFS14612-5. The spreadsheet calculates the 20 from the following equation: (A) divided by (B) where (A) equals the number of individual NARW sighted in 2018 = 9, (B) 58 equals the number of days in year in which bottlenose dolphin, Short-beaked common dolphin, Fin whale, Gray Seal, Harbor Porpoise, Harbor Seal, Humpback Whale, Long-finned pilot whale, Minke

Whale, NARW, Pilot Whale, Seal, Sei whale, Sperm whale, Unidentified Dolphin, Unidentified Mysticete Whale, Unidentified Shelled Sea Turtle, Unidentified Whale, white-sided dolphin were sighted. *Id*.

- 35. NMFS's methodology shows that the take is more than "small numbers," and above what NMFS concluded was "small numbers." NMFS concluded that up to 5.4% of a species constituted "small numbers." NMFS 3486. The NMFS calculation of takes was based upon a methodology proposed by Vineyard Wind. NMFS 14612-5. The "small number" conclusion was reached because the take of the NARW was 5.0% of the species using the Vineyard Wind methodology. But no analysis was performed by NMFS supporting its conclusory statement that 5.4% of a species is "small numbers" for the NARW. *Id.*, NMFS 3392-3427, 3482-3488.
- 36. The 5.0% was reached by dividing the calculated take—20—by the abundance of the species. Vineyard Wind and NMFS used old data—394. *Id.* The NMFS's conclusion when the IHA was issued was that the population of NARW had dwindled to 356 (i.e., 5.6%). NMFS 3484. The most recent scientific evidence is that the NARW population is now at 336, SUF 12, increasing the take number to 6.0%.
- 37. In addition to the denominator being wrong, the numerator is as well. The NMFS analysis hinges on manifestly erroneous assumptions, such as an extremely low level of NARWs in the wind energy area, and ignoring vessel transits and other activity (except for pile driving noise). NMFS 3482-3488, 14612-5.
- 38. NMFS considers noise as one of the top four threats to the NARW. Melone Decl., Exh. F.
- 39. The NARW have moved-in to the Wind Energy Area all year round, are arriving earlier, staying longer and increasing in numbers, and that the area is an important foraging and

socialization area. The most recent studies, *Quintana 2021* and *O'Brien 2022*, indicate that right whale presence in the RI/MA WEA, which includes the project development area (WDA), is quite high during the summer and extends into the fall. NMFS 53329, 53331, Melone Decl., Exhs. A, E. This finding is consistent with the growing body of evidence that right whale migration and behavior patterns have shifted dramatically due to environmental conditions. BOEM 77331. Right whales now spend time in the Vineyard Wind WDA year-round. NMFS 53324, 53329, 53331, Melone Decl., Exhs. A, E.

- 40. Vineyard Wind's soft-start is intentional take. The IHA requires and authorizes, as Level B harassment, Vineyard Wind to initiate each pile driving event with a "soft start" where the pile driving hammer will be throttled back to less than maximum power, thus giving the whales a "warning" of what is to come. BOEM 34742, 77310, 77458. The theory is that the "soft start" will convince the whales to leave the construction zone before the full- magnitude pile driving begins. BOEM 77458. The "soft start", however, is not incidental harassment but purposeful, intentional harassment, a type of hazing, designed to push the NARW out of their habitat. It is not accidental. *See*, 50 C.F.R. 216.103 ("Incidental harassment, incidental taking and incidental, but not intentional, taking all mean an accidental taking.") Thus, Vineyard Wind's soft start constitutes an intentional take that NMFS cannot authorize.
- 41. Vineyard Wind's soft start also constitutes unauthorized Level A harassment. Level A harassment, as defined in the MMPA for non-military readiness activities, is any act of pursuit, torment, or annoyance that has the potential to injure a marine mammal or marine mammal stock in the wild. Even if the "soft start" strategy effectively pushes all right whales out of the Level A exposure zone (i.e., 7.25 km from the pile driving area), there is no evidence the whales will be safe. On the contrary, there is considerable evidence that the whales will be exposed to

increased threats from fishing gear entanglement and vessel strikes. For example, Area 537 is one of the most heavily fished areas in the Massachusetts OCS with hundreds perhaps thousands of VBR trap/pots for lobster and crab. BOEM 77581; BOEM 194539. By forcing right whales out of the WDA, the Vineyard Wind soft start program will drive the whales right into this network of fishing ropes, heightening the threat of entanglement. The threat of vessel strikes against whales will also increase outside the WDA, as vessels in this area are not subject to NMFS's sometimes applicable 10 knot speed limit; nor are they required to have a PSO onboard looking for whales.

- 42. In addition, to the extent the soft start forces feeding whales to leave and try to locate food elsewhere, the loss of foraging opportunity, in itself, may be damaging, especially given data showing that malnutrition has caused female North Atlantic right whales to lose weight and exhibit signs of reduced physical health. NMFS 26386-26401. NMFS contends that right whales which have been prevented from foraging in the WDA during pile driving will simply come back and resume feeding once the pile driving stops. BOEM 77460-63. There is, however, no evidence to support this argument.
- 43. Vineyard Wind is proposing to conduct its COP activities in the region where the NARW now live year-round and which is now critical foraging and mating grounds. *Quintana* 2021 and O'Brien 2022.
- 44. Vineyard Wind will be conducting a highly disruptive multi-hour pile-driving operation knowing that whales are in the vicinity.
- 45. "North Atlantic right whales are vulnerable to vessel strike due to their coastal distribution and frequent occurrence at near-surface depths, and this is particularly true for females with calves. The proportion of known vessel strike events involving females, calves, and juveniles is higher than their representation in the population (NMFS 2020)." NMFS Proposed Speed Rules,

at 46922-46923 (2022). "Reducing vessel speed is one of the most effective, feasible options available to reduce the likelihood of lethal outcomes from vessel collisions with right whales." *Id.* at 46923. "Vessel strikes continue to occur all along the U.S. coast from the Gulf of Maine to the Florida coast. There is no indication that strike events only occur in "hot spots" or limited spatial/ seasonal areas." *Id.* at 46924. In many cases, the location of the strike event remains unknown." Id. "[T]he current speed rule and other vessel strike mitigation efforts are insufficient to reduce the level of lethal right whale vessel strikes to sustainable levels in U.S. waters." *Id.* at 46925. "It remains unclear how right whales respond to close approaches by vessels (<1509 ft (460 m)) and the extent to which this allows them to avoid being struck." *Id.* at 46926.

- A6. NMFS has failed to proscribe a speed limit on all Vineyard Wind's vessels, all the time, as part of the measures so as to result in the least practicable impact on the NARW. NMFS has failed to take a hard look at the measures needed to ensure that there is no death or serious injury to even a single whale from Vineyard Wind's COP activities. But what is clear from the NMFS Proposed Speed Rules is that a 10-knot speed limit on all vessels at all times of the year (with no exceptions) practicable and is the *maximum* that could be allowed but even with speed limit below 10-knots a strike to a single NARW would cause serious injury.
- 47. Limiting the speed of all vessels to no more than 10-knots is practicable as the agreement made by South Fork Wind LLC shows. Melone Decl., Exh. G.
- 48. NMFS has also acted arbitrarily and capriciously and failed to adhere to its obligation under 16 U.S.C. §1371(a)(5)(D)(iv) and 16 U.S.C. §1371(a)(5)(D)(ii) by failing analyze how the proposed Vineyard Wind activities and the activities of the other IHAs that are in effect will also increase the risk of collisions between NARWs and vessel traffic unrelated to offshore

wind activities as both navigate around the various offshore wind activities in question while they occur.

49. NMFS has issued numerous other IHAs authorizing take of the NARW that precede the authorized dates of the Vineyard Wind IHA. By the time the Vineyard Wind IHA dates kickin, the NMFS will have already authorized take since 2019 of 377 NARW (319 of which have been authorized since the Vineyard Wind IHA was issued) as shown below:

Project	Covered activities	Beginning of covered period	End of covered period	Level B Harassment Takes	Date IHA Issued
Vineyard Wind 1	Pile driving only	5/1/2023	4/30/2024	20	5/21/2021
South Fork Wind LLC	Construction	11/15/2022	11/14/2023	13	12/21/2021
Attentive Energy LLC	Marine surveys	9/15/2022	9/14/2023	3	8/16/2022
Atlantic Shores Offshore Wind Bight, LLC	Marine surveys	8/10/2022	8/9/2023	24	8/10/2022
Park City Wind LLC	Marine surveys	9/1/2022	8/31/2023	30	7/19/2022
Vineyard Northeast, LLC	Marine surveys	7/27/2022	7/26/2023	40	7/27/2022
NextEra	Marine surveys	7/1/2022	6/30/2023	8	6/29/2022
VEPCO	Marine surveys	5/27/2022	5/26/2023	5	5/27/2022
Ocean Wind II LLC	Marine surveys	5/10/2022	5/9/2023	11	5/9/2022
Orsted Wind Power North America LLC (Delaware)	Marine surveys	5/10/2022	5/9/2023	11	5/6/2022
Ocean Wind LLC	Marine surveys	5/10/2022	5/9/2023	9	5/9/2022
Kitty Hawk	Marine surveys	8/1/2022	7/31/2023	2	4/20/2022
Atlantic Shores Offshore Wind LLC	Marine surveys	4/20/2022	4/19/2023	17	4/18/2022
Orsted Wind Power NA	Marine surveys	3/3/2022	9/24/2022	37	3/3/2022
Vineyard Wind 1 LLC	Marine surveys	7/21/2021	7/20/2022	10	7/21/2021
Vineyard Wind LLC	Marine surveys	6/21/2021	6/20/2022	10	7/15/2021
Vineyard Wind 1	Marine surveys	7/21/2021	7/20/2022	10	7/21/2021

Mayflower Wind	Marine surveys	7/1/2021	6/30/2022	9	7/1/2021
Energy LLC					
Vineyard Wind LLC	Marine surveys	7/15/2021	6/20/2022	10	7/15/2021
Garden State	Marine surveys	6/11/2021	6/10/2022	14	6/11/2021
Offshore Energy LLC					
Ocean Wind LLC	Marine surveys	5/10/2022	5/9/2023	9	5/9/2022
Atlantic Shores	Marine surveys	4/20/2021	4/19/2022	8	4/16/2021
Offshore Wind LLC					
Skipjack Offshore	Marine surveys	4/5/2021	4/4/2021	3	4/5/2021
Energy LLC					
Orsted Wind Power	Marine surveys	3/3/2022	9/24/2022	37	3/3/2022
North America					
Equinor Wind, LLC	Marine surveys	9/20/2020	9/19/2021	14	9/20/2020
Mayflower Wind	Marine surveys	7/23/2020	7/22/2021	3	7/23/2020
Energy, LLC					
Vineyard Wind LLC	Marine surveys	6/21/2020	6/20/2021	10	4/15/2020
Skipjack Offshore	Marine surveys	11/25/2019	11/24/2020	3	11/25/2019
Energy, LLC					
Ørsted Wind Power	Marine surveys	9/26/2019	9/25/2020	10	9/26/2019
LLC					
Equinor Wind U.S.	Marine surveys	4/25/2019	4/24/2020	7	4/25/2019
LLC					

Melone Decl. ¶27.

- 50. NMFS has an obligation under 16 U.S.C. §1371(a)(5)(D)(iv) and 16 U.S.C. §1371(a)(5)(D)(ii)(II) to take all these IHAs into account (particularly those issued after the Vineyard Wind IHA was issued) and to make new determinations that the requirements of the MMPA would still be met (which they would not be). NMFS has failed to do so.
- 51. One of the measures prescribed in an attempt to mitigate harm to NARWs is the use of PSOs, whose task is to scan the ocean from ship decks and other platforms looking for right whales. (BOEM 77457-77458.) If they see one, they are to alert the lead engineer who must, in turn, halt all pile driving until the whale leaves on its own volition. For moving vessels, the vessel must avoid the area of the NARW and lower its speed to 10 knots. The PSO strategy has multiple fatal flaws. Melone Decl. ¶12.

- 52. First, although the Level A impact zone extends 7,253 meters, the NMFS BiOp admits that a PSO cannot accurately detect and identify a right whale beyond 1,500 meters. (BOEM 77457-77458.) This means that right whales could be exposed to Level A noise and damage but at distances beyond the detection limit of the PSO. But even the 1,500 meter allegedly visibility zone for a PSO is a stretch even under ideal conditions. From Plaintiff's experience using the long-lenses that a PSO would use, absent setting the lenses on a secure unmoving stationary base, it would be almost impossible to detect a NARW at 1,500 meters or even 1,000 meters. When Plaintiff was able to view and detect the NARWs off Fernandina Beach, he was in an elevated position providing a much better angle of view than that of a PSO from the deck of a vessel. He was also stationary and the conditions were ideal. A PSO on a vessel such as a crew transfer vessel will be travelling approximately 30 mph, moving up and down and side to side as the vessel moves and frequently be travelling in less-than-ideal conditions. Even under clear conditions, accurately detecting a NARW on a vessel such as a crew transfer vessel travelling approximately 30 mph will depend mostly on luck, unless it is relatively close to the vessel. Melone Decl. ¶13.
- 53. Two: The PSOs can only detect whales at the water's surface, and even that is difficult when conditions are sub-optimal i.e., poor light, bad weather, fog, high seas, large swells. To make matters worse, right whales have no dorsal fin (BOEM 77330), unlike the humpback, which makes them even harder to spot. This means that the PSOs, while technically capable of seeing a right whale on the water surface at 1,500 yards, will miss all the whales under the water. And these undetected whales will thus be exposed to Level A pile driving noise. Melone Decl. ¶14.
 - 54. Three: The BiOp includes an exception to the "stop all pile driving when right

whales are detected" rule. The lead engineer can override the shutdown directive and continue pile driving if necessary to safeguard human safety or the integrity of the pile driving installation. (BOEM 77454.) In other words, if the lead engineer (employed by Vineyard Wind) believes that halting pile driving due to the presence of right whales will somehow adversely affect the pile driving effort, he or she can keep letting the hammer drop. Melone Decl. ¶15.

55. Four: While the BiOp generally prohibits pile driving at night, it allows a pile driving episode to continue beyond sunset if begun during the daylight hours. (BOEM 77307, 77454.) Consequently, there will be times when pile driving is taking place in the dark. During such pile driving events, the PSOs will be completely useless, and the pile driving will take place "blind" in terms of visual detection of right whales, as will any return vessel trip to shore. Melone Decl. ¶16.

Respectfully submitted,

Dated: September 7, 2022

at Edgartown, MA

/s/ Thomas Melone

Thomas Melone BBO No. 569232

Allco Renewable Energy Limited

157 Church St., 19th Floor New Haven, CT 06510

Telephone: (212) 681-1120 Facsimile: (801) 858-8818 Thomas.Melone@AllcoUS.com

Certificate of Service

I HEREBY CERTIFY that on this 7th day of September 2022, a true and complete copy of the foregoing has been filed with the Clerk of the Court pursuant to the Court's electronic filing procedures, and served on counsel of record via the Court's electronic filing system.

/s/Thomas Melone